

## EAST Search History

### EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	44	((TOBIAS) near2 (SCHMIDT)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/19 15:53
L2	1	((MATHIAS) near2 (MAHNKE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/19 15:53
L3	30	((UWE) near2 (LEHMANN)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/19 15:53
L4	73	L1 L2 L3	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/19 15:53
L5	44	((TOBIAS) near2 (SCHMIDT)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/19 15:53
L6	1	((MATHIAS) near2 (MAHNKE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/19 15:53
L7	44	5 6	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/19 15:54
S1	1	"20060210441".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/01/15 18:01
S2	6	("20020176804"   "20040223282"   "4474889"   "4493476"   "5178190"   "5909078").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/09 15:24
S3	2	"10315282".pn.	DERWENT	OR	ON	2009/02/09 18:27
S4	1	"19726000".pn.	DERWENT	OR	ON	2009/02/09 18:51
S5	4	"9627792".pn. "9006470".pn.	DERWENT	OR	ON	2009/02/09 18:54
S6	1	"9627792".pn. "9006470".pn.	EPO	OR	ON	2009/02/09 18:55
S7	2350	\$chromatogra\$ and ("dead volume" dead \$1volume)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/09 18:58
S8	877	(gas with \$chromatogra\$) and ("dead volume" dead \$1volume\$ "dead volumes")	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 10:28
S9	1	"1,867,982".pn.	EPO	OR	ON	2009/02/10 13:01

S10	309	(gas with \$chromatogra\$) and ("dead volume" dead \$1volume\$ "dead volumes") and injector	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 15:37
S11	87	sls.as.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 16:21
S12	514	sls.as.	FPRS; EPO; JPO	OR	ON	2009/02/10 16:25
S13	7	sls.as. and \$chromatogra\$	FPRS; EPO; JPO	OR	ON	2009/02/10 16:26
S14	13	((TOBIAS) near2 (SCHMI DT)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 16:34
S15	1	((MATHIAS) near2 (MAHNKE)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 16:34
S16	22	((UWE) near2 (LEHMANN)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 16:34
S17	24	((TOBIAS) near2 (SCHMI DT)).INV.	EPO; JPO; DERWENT	OR	ON	2009/02/10 16:44
S18	34	S14 S15 S16	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 16:45
S19	1	((MATHIAS) near2 (MAHNKE)).INV.	EPO; JPO; DERWENT	OR	ON	2009/02/10 16:45
S20	57	((UWE) near2 (LEHMANN)).INV.	EPO; JPO; DERWENT	OR	ON	2009/02/10 16:45
S21	80	S17 S19 S20	EPO; JPO; DERWENT	OR	ON	2009/02/10 16:45
S22	511	422/89.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:08
S23	127	422/89.ccls. and injector	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:10
S24	1	"6632404".pn.	DERWENT	OR	ON	2009/02/10 18:13
S26	330	422/89.ccls. and (valve injector (flow with divert \$))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:23
S27	203	S26 not S23	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:23
S29	111	(gas with \$chromatogra\$) and (slid\$4 near valve)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:27
S30	11	(gas with \$chromatogra\$) and (slid\$4 near valve) and ("dead volume" dead \$1volume\$ "dead volumes")	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:28

S31	148	(slid\$4 near valve) and ("dead volume" dead \$1volume\$ "dead volumes")	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:32
S32	1	"20060060811".pn.	DERWENT	OR	ON	2009/02/10 18:34
S33	0	2003/0015682.pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:52
S34	1	"20030015682".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 18:53
S36	99	S29 not (S31 S23)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/10 19:47
S37	68	73/19.02.ccls. and (valve injector (flow with divert \$))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:00
S38	207	96/105.ccls. and (valve injector (flow with divert \$))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:34
S39	312	96/105.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:39
S40	105	S39 not S38	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:39
S41	71	95/89.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:42
S42	984	73/23.35-23.42.ccls. and (valve injector (flow with divert\$))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:46
S43	330	422/89.ccls. and (valve injector (flow with divert \$))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:47
S44	111	(gas with \$chromatogra\$) and (slid\$4 near valve)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:47
S45	148	(slid\$4 near valve) and ("dead volume" dead \$1volume\$ "dead volumes")	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:47
S46	725	S42 not (S41 S39 S37 S45 S44 S43)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:47
S47	15	73/23.35-23.42.ccls. and (slid\$4 near valve)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:48
S48	489	210/659.ccls. not (S41 S39 S37 S45 S44 S43)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:50
S49	198	73/61.56.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 11:55
S50	1	"20070107499".pn.	DERWENT	OR	ON	2009/02/11 11:56

S51	0	"20010190237".pn.	US-PGPUB; USPAT	OR	ON	2009/02/11 11:59
S52	1	"20010019843".pn.	US-PGPUB; USPAT	OR	ON	2009/02/11 12:00
S53	8933	("251"/\$.ccls. "137"/\$.ccls.) and (slid\$4 near valve)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 13:48
S54	19	("251"/\$.ccls. "137"/\$.ccls.) and (slid\$4 near valve) and \$chromatogra\$	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 13:53
S55	1	"20070144594".pn.	DERWENT	OR	ON	2009/02/11 13:55
S56	1	"6702256".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 13:58
S57	9	("2371632"   "2479177"   "2677390"   "3186234"   "3633426").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 14:02
S58	36	("4119120").URPN.	USPAT	OR	ON	2009/02/11 14:04
S59	35	("2830738"   "3160015"   "3222135"   "3298786"   "3570540"   "3915652"   "3933165"   "4022065"   "4047540"   "4064908"   "4168235"   "4182184"   "4580759"   "5034193"   "5205845"   "5367912"   "5390552"   "5449064"   "5524496"   "5578268"   "5780717"   "5803117"   "5961925"   "6012487"   "6149882"   "6296749"   "6318157").PN. OR ("6632404").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:18
S60	19	("3035809"   "3150517"   "3294119"   "3521674"   "4334552").PN. OR ("4493476").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:22
S61	36	("4325412"   "4581624"   "5054522").PN. OR ("5178190").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:23
S62	484	((layer\$ laminat\$ sheet) with (manifold valve)) and ("dead volume" dead \$1volume\$ "dead volumes")	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:25

S63	161	((layer\$ laminat\$ sheet) with (manifold valve)) and ("dead volume" dead \$1volume\$ "dead volumes") and \$chromatogra\$	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:26
S64	576	((layer\$ laminat\$ sheet) with (manifold valve)) and (gas with \$chromatogra\$)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:40
S65	520	S64 not S63	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:40
S66	36	("4325412"   "4581624"   "5054522").PN. OR ("5178190").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:52
S67	5	("2003/0015682").URPN.	USPAT	OR	ON	2009/02/11 15:52
S68	1	"20030015682".pn.	DERWENT	OR	ON	2009/02/11 15:53
S69	1	"6702256".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:53
S70	18	("4869282"   "5291226"   "5305015"   "5333831"   "5368704"   "5417235"   "5500071"   "5571410"   "5645702"   "5705813"   "5725017"   "5771902"   "5819749"   "5927325"   "5964239"   "6102068"   "6550497").PN. OR ("6702256").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:53
S71	36	("20010048900"   "20020057627"   "20020125134"   "20030015682"   "20030017609"   "20030159993"   "3182967"   "4483621"   "4869282"   "5291226"   "5305015"   "5333831"   "5368704"   "5417235"   "5500071"   "5571410"   "5645702"   "5725017"   "5771902"   "5819794"   "5921678"   "5927325"   "5964239"   "6065864"   "6082891"   "6102068"   "6146103"   "6264900"   "6331072"   "6331073"   "6550497").PN. OR ("6916113").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:54

S72	10	("3225520"   "4484061"   "5544276"   "6102068"). PN. OR ("6601606"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:56
S73	19	("3057376"   "3312238"   "4119120"   "4353243"   "4858883"   "5083742"   "5176359"   "5325889"   "5361802"   "5544276"   "5601115"   "5653259"). PN. OR ("6374860"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:57
S74	49	("1605832"   "2453553"   "2846121"   "2857082"   "2858851"   "2904070"   "3100984"   "3122168"   "3131706"   "3160015"   "3222135"   "3549994"   "3567389"   "3567390"   "3583232"   "3652228"   "3858450"   "3976429"   "3990853"   "3991055"   "4030888"   "4152391"   "4445391"). PN. OR ("4726237"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 15:58
S75	22	("2981092"   "3040770"   "3070990"   "3116642"   "3150517"   "3297053"   "3349800"   "3442285"   "3489011"). PN. OR ("3681998"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:00
S76	27	("3223123"). URPN.	USPAT	OR	ON	2009/02/11 16:01
S77	38	("2833311"   "3070989"   "3201922"   "3368385"   "3753653"   "3785616"   "3916465"   "4044593"   "4057998"   "4474889"   "4634434"   "4935040"   "5053200"   "5105652"). PN. OR ("5340543"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:03
S78	18	("3150517"). URPN.	USPAT	OR	ON	2009/02/11 16:04

S79	42	("2833151"   "2972888"   "2973117"   "3203249"   "3230048"   "3297053"   "3504799"   "3530721"   "3533295"   "3559458"   "3585863"   "3862038"   "3960003"   "4068528"   "4243071").PN. OR ("4444066").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:05
S80	21	("2846121"   "3112639"   "3116642"   "3150517"   "3267736"   "3447360"   "3489011"   "3800602").PN. OR ("3916465").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:07
S81	15	("4017262"   "4452067"   "4567753"   "4577492"   "5071547"   "5547497"   "5567307"   "5652398").PN. OR ("5958227").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:09
S82	3	("4027692"   "4181141"   "5766460").PN. OR ("6478042").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:10
S83	45	("2371632"   "2479177"   "2677390"   "3186234"   "3633426").PN. OR ("4119120").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:10
S84	82	("3889711"   "3934611"   "4119120"   "4203128"   "4304260"   "4333500"   "4471647"   "4562724"   "4581624"   "4647013"   "4676897"   "4756508"   "4768751").PN. OR ("4869282").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:16
S85	40	("2995410"   "3035383"   "3043127"   "3077766"   "3095746"   "3139755"   "3223123"   "3225520"   "3225521"   "3247702"   "3449938"   "3507147"   "3537297"   "3581465"   "3859209"   "3897679"   "4470832").PN. OR ("4521225").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:18
S86	17	("2846121"   "3112639"   "3267736"   "3447360"   "3489011"   "3501961").PN. OR ("3800602").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:19

S87	18	("3150517").URPN.	USPAT	OR	ON	2009/02/11 16:19
S88	7	("3201922").URPN.	USPAT	OR	ON	2009/02/11 16:20
S89	15	("2846121").URPN.	USPAT	OR	ON	2009/02/11 16:21
S90	38	("2751034"   "3297053"   "3368385"   "3411525"   "3477207"   "3508582"   "3747630"   "3868970"   "4294285"   "4367645"   "4444066"   "4552178"   "4614204"   "4625569"   "4690179"   "4705627"   "4926702"   "5010921"   "5105851"   "5390552"   "5595211"   "5803117"). PN. OR ("6012487"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:21
S91	23	("2719426"   "2751034"   "2918938"   "3040777"   "3198004"   "3422848"   "4552178"   "5010921"). PN. OR ("5803117"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/11 16:22
S92	9	("3489011").URPN.	USPAT	OR	ON	2009/02/11 16:24
S93	3	"3916465".pn.	DERWENT	OR	ON	2009/02/11 17:56
S94	1	"20030026741".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/11/24 14:00
S96	1	"12750586"	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/17 13:14
S97	1	"7695681".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2011/02/17 13:15

## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L9	461	210/659.ccls.	USPAT; UPAD	OR	ON	2011/02/19 16:03
L10	164	73/61.56.ccls.	USPAT; UPAD	OR	ON	2011/02/19 16:04
L11	68	95/89.ccls.	USPAT; UPAD	OR	ON	2011/02/19 16:04
L12	409	422/89.ccls.	USPAT; UPAD	OR	ON	2011/02/19 16:04
L13	924	422/70.ccls.	USPAT; UPAD	OR	ON	2011/02/19 16:04
L14	1225	73/23.35-23.42.ccls.	USPAT; UPAD	OR	ON	2011/02/19 16:05

L15	1	73/23.35-23.42.ccls. and (slid\$4 near valve).clm.	USPAT; UPAD	OR	ON	2011/02/19 16:05
L16	63	73/23.35-23.42.ccls. and (mini\$).clm.	USPAT; UPAD	OR	ON	2011/02/19 16:05
L17	63	73/23.35-23.42.ccls. and (mini\$).clm.	USPAT; UPAD	OR	ON	2011/02/19 16:05
L18	12	96/105.ccls. and (mini \$).clm.	USPAT; UPAD	OR	ON	2011/02/19 16:06
L19	7	73/19.02.ccls. and (mini\$).clm.	USPAT; UPAD	OR	ON	2011/02/19 16:06

2/19/2011 4:06:55 PM

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